

Annexure-I

MINES ENVIRONMENT AND MINERAL CONSERVATION WEEK EVALUATION SHEET FOR OPENCAST MINES	
Region:	State:
Name of the Mine	
Name of the Lessee	
Mineral(s)	
Method of Mine working	
Category of mine	A-FM- <input type="checkbox"/> A-OTFM <input type="checkbox"/> B-Manual <input type="checkbox"/>

Sl. No.	Themes	Sub Themes	Marks allotted for particular theme/sub theme	Marks awarded
1	AFFORESTATION		250	
		Total Lease Area (ha) Break up of area: Forest Land (ha) Private Land (ha) Revenue land (ha) Others, if any		
		Afforestation within ML a. Acquired area in ha. b. Area under afforestation (in Ha.) (during the year & cumulative) c. Number of trees planted (during the year & cumulative) d. Number of plants per Ha. e. Housekeeping including display of plantation details f. Type of plant species g. Avenue plantation h. Survival rate i. Maintenance of nursery/procurement of saplings j. Aftercare of saplings planted	150	
		Afforestation outside ML a. Area under afforestation (in Ha.) (during the year & cumulative) b. Number of trees planted during the year & cumulative) c. Number of plants per Ha. d. Type of plant species e. Housekeeping including display of plantation details	50	

		f. Survival rate g. Aftercare of saplings planted		
		<u>Top soil Management:-</u> a. Thickness of top soil b. Collection and storage (i) During the year (ii) Cumulative c. Utilization (i) During the year (ii) Cumulative	50	
Note: i) Afforestation is required to be 10% or more than the acquired area. ii) Number of saplings/tree per hectare is to be more than 1000.				
2	WASTE DUMP MANAGEMENT		100	
		a. Proper Design and Maintenance of waste dumps terraces, dump slopes, drainage channel on terraces, berms etc. b. Building & maintenance of check dams, retention wall, pack wall, garland drains, gully plugs, silt settling tank etc. c. Growing of grass, suitable plants on the inactive dumps with or without geo-textile / coir matting		
3	SYSTEMATIC AND SCIENTIFIC DEVELOPMENT		100	
		a. Implementation of proposals approved in Mining Plan b. Compliance of violations. c. Bench formation and advancement d. Geotechnical / Slope stability studies undertaken if any e. Haulage roads f. Use of mine planning software g. Overall layout		
Note: Subjective decision of the inspection team with verification of the relevant records.				

4	MINERAL CONSERVATION		150	
		a. Name of the minerals, Cutoff grade of commercial ore, whether grade-wise separate stacks are maintained. b. Whether mineral rejects above threshold value has been stacked separately c. Day to day maintenance records of various stacks. d. Housekeeping of the said mineral reject/sub grade ore stacks e. Utilization of mineral rejects by blending after stacking of directly or by using software technology f. Recovery from tailings g. Recovery from old dumps		
Note: Subjective decision of the inspection team with verification of the relevant records.				
5	RECLAMATION & REHABILITATION		100	
		a. Area reclaimed b. Area rehabilitated	50 50	
<p>Note- <u>Reclamation</u> : To bring back the mined out land nearly to the pre-mining stage through backfilling or for better use of the land compared to pre-mining condition.</p> <p><u>Rehabilitation</u>: The aesthetics/plantation around the reclaimed land/waste dump can be termed as rehabilitation.</p>				
6	MINERAL BENEFICIATION		100	
		a. Beneficiation practices (feed grade, product grade, tailing grade, and recovery percentage design and actual and tailing loss) b. Maintenance of equipment's installed at plant (schedule of preventive maintenance/keeping the records of maintenance) c. Prestart check lists/ planned task observations/ standard operating procedures d. Technological upgradation for getting optimum yield e. QA/QC report of sample at lab f. Plant audit/process audit		
Note: Subjective decision of the inspection team with verification of the relevant records.				
7	ENVIRONMENTAL MONITORING		100	
		a. Ambient Air Quality b. Surface Water Quality/mine discharge points c. Ground Water Quality d. Noise Level e. Ground Vibration		

		<ul style="list-style-type: none"> f. Provision of water spraying at loading & transport point g. Utilization of ground water / pit water dewatering for drinking, agriculture and other purposes h. Water harvesting /recycling 		
Note: Subjective decision of the inspection team with verification of the relevant records and permissible limits thereon.				
8	SUSTAINABLE DEVELOPMENT		200	
		<ul style="list-style-type: none"> a. Constitution of SDU (Sustainable Development Unit) at Mine level - team of Mine management comprising of Technical, Financial, CSR, HRD, Environment heads for ensuring implementation of SDF principles. b. Total expenditure incurred for implementation of SDF at mine level including -Environment Protection, - CSR & other welfare activities in peripheral area c. Innovation in energy saving by use of solar power or other sources d. Community development: housing, water supply and sanitation, medical facilities, education facilities, transportation, recreation, skill development, efforts to make villages Open Defecation Free(ODF) e. Disposal of mill tailing / tailing dam management f. Identification of safety hazards through mechanism viz., through Hazard slips, filling of daily checklist operators/supervisors etc., g. Proper setting of residential colony h. Proper setting of administrative and industrial buildings i. Effort for zero waste mining j. Community centers 		
Note: Subjective decision of the inspection team with verification of the relevant records.				
9	PUBLICITY AND PROPAGANDA		100	
		<ul style="list-style-type: none"> a. Drama on mining and environmental awareness b. Posters c. Slogans d. Model (mine, machineries) e. Debate, quiz, lectures f. Skill development & Vocational Training programmes for local communities g. Standard operating procedures and its review h. Illumination i. Digital Publicity 		
Note: Subjective decision of the inspection team with verification of the relevant records.				

OVERALL PERFORMANCE

Sl No	Theme	Maximum Marks	Marks expressed in percentage out (%)
1	AFFORESTATION		
2	WASTE DUMP MANAGEMENT		
3	SYSTEMATIC & SCIENTIFIC DEVELOPMENT		
4	MINERAL CONSERVATION		
5	RECLAMATION AND REHABILITATION		
6	MINERAL BENEFICIATION		
7	ENVIRONMENTAL MONITORING		
8	SUSTAINABLE DEVELOPMENT		
9	PUBLICITY AND PROPAGANDA		

Date of inspection		
Group under which mine falls		
Inspection Team	Name/Designation/Organisation	Signature
Convenor		
Member:		
Member:		